



National Agromet Advisory Service Bulletin
Based on
Extended Range Weather Forecast (ERFS)

Validity: 22 March to 04 April 2019

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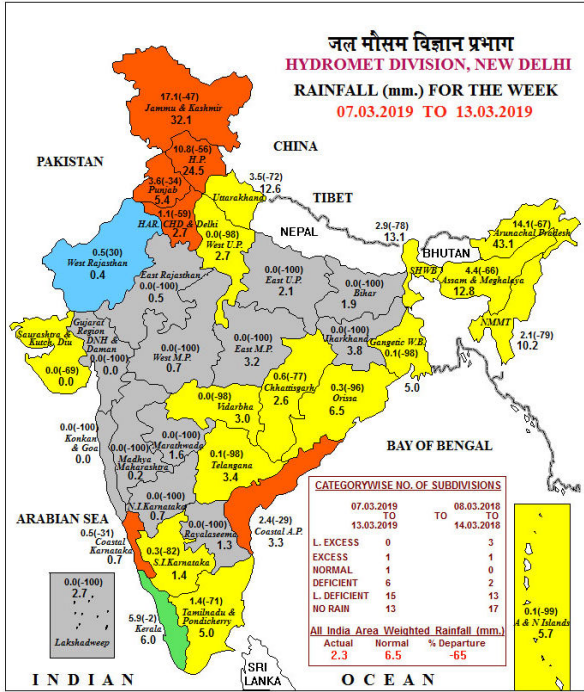
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&
Earth System Science Organization
India Meteorological Department

Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

Realized Rainfall

(7th to 20th March 2019)

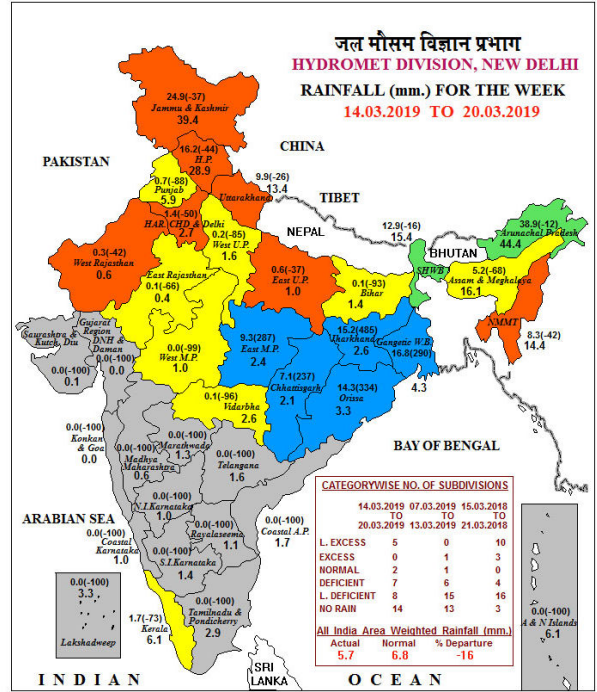
भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



LEGEND: ■ L. EXCESS (+60% OR MORE) ■ EXCESS (+20% TO +59%) ■ NORMAL (+19% TO -19%)
■ DEFICIENT (-20% TO -59%) ■ L. DEFICIENT (-60% TO -99%) ■ NO RAIN (-100%) ■ NO DATA

NOTES:
[a] Rainfall figures are based on operational data.
[b] Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.)
Percentage Departures of Rainfall are shown in Brackets.

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[a] Rainfall figures are based on operational data.
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- Normal or above normal rainfall occurred in either of the two weeks in Jharkhand, Odisha, West Bengal & Sikkim, Arunachal Pradesh, West Rajasthan, East Madhya Pradesh, Chhattisgarh and Kerala.
- Below normal rainfall / no rain occurred over rest of the country.

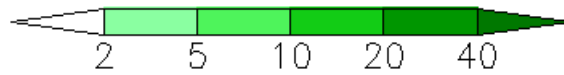
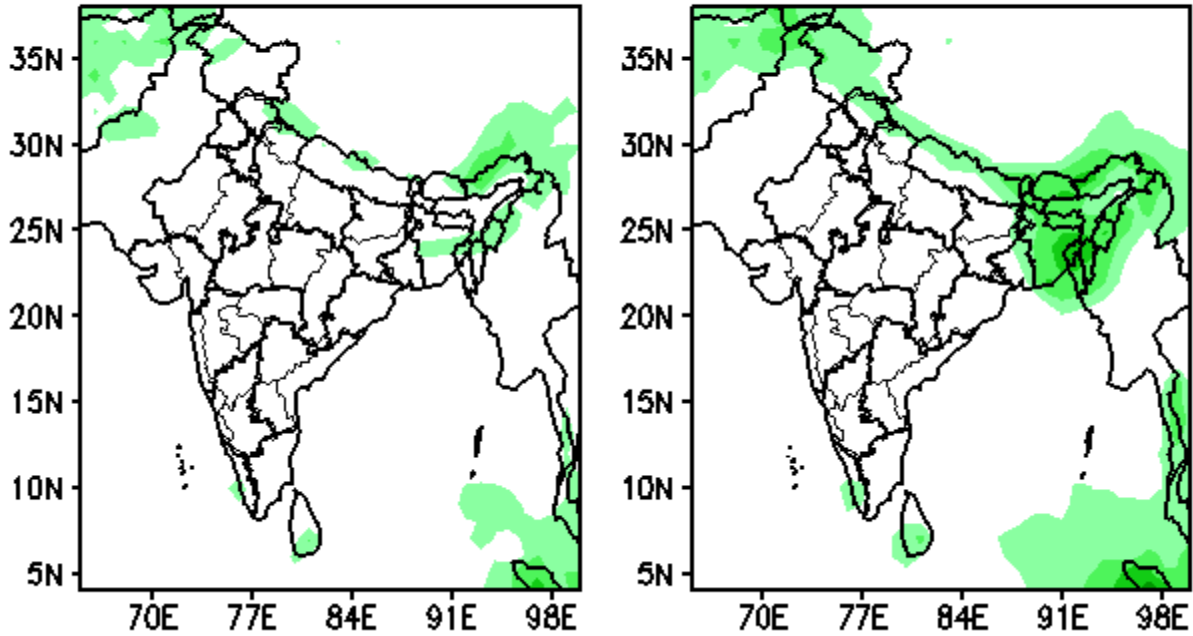
Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC – 20 March)
(22nd March to 4th April 2019)

Actual Rainfall (mm/day)

(Week1: 22Mar–28Mar)

(Week2: 29Mar–04Apr)

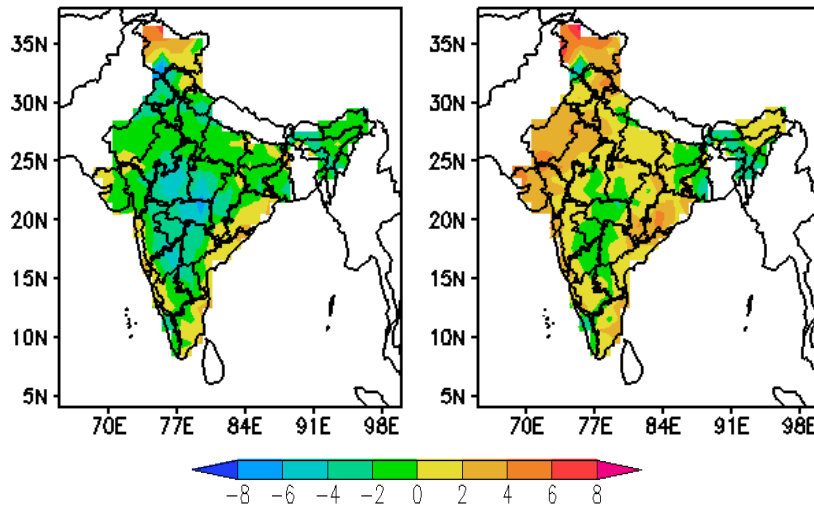


**Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast
for next 2 weeks (IC – 20 March)
(22nd March to 4th April 2019)**

MME Bias Corrected Tmax Anomaly (Deg)

(Week1: 22Mar–28Mar)

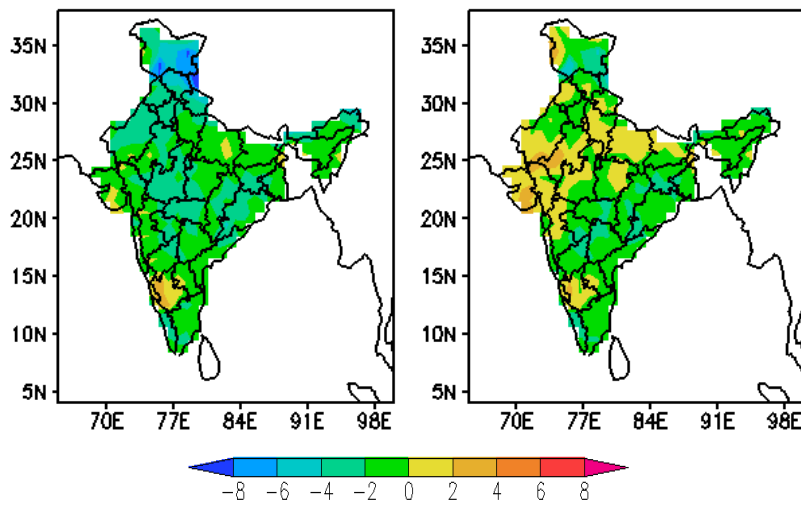
(Week2: 29Mar–04Apr)



MME Bias Corrected Tmin Anomaly (Deg)

(Week1: 22Mar–28Mar)

(Week2: 29Mar–04Apr)



Strategic Agricultural Planning based on rainfall during next two weeks till 4th April 2019

Agromet Advisories

Kerala

Amount of rainfall received during the period from 01 to 21 March 2019 over Kerala is 9.8 mm (38% deficit).

- In banana, propping should be followed to reduce the damage due to high wind velocity. Destroy the affected leaves along with the Spodoptera. If attack is severe, spray Flubendiamide 2 ml/10 litre of water.
- Farmers should be vigilant about Azhukal disease. Keep the field weed free and rake the inter spaces in cardamom.
- Farmers are advised to spray Quinalphos (0.05%) 400 ml in 200 litres of water against coffee berry borer.
- White powdery spots are seen on the leaves of cucurbitaceous vegetables. Apply 1.5 ml Tebuconazole or 0.5 ml Difenoconazole per one litre of water. After 10 days, apply 20 gram of Trichoderma viride per one litre of water to control Powdery mildew disease of vegetables.
- There is a chance of aphid attack in vegetables. Apply 2% neem oil emulsion or apply 20 gram Verticillium lecanii per one litre of water within ten days intervals. If aphid attack is severe, apply 3 ml Imidacloprid per 10 litre of water.

Karnataka

Amount of rainfall received during the period from 01 to 21 March 2019 over South Interior Karnataka is 0.6 mm (88% deficit), Coastal Karnataka is 0.5mm (77% deficit) and no rainfall over North Interior Karnataka.

South Interior Karnataka

- To protect the pulse grains from storage pests, apply oils of castor/ linseed/neem oil @ 3-5 ml per kg of grains.
- In already harvested fields, farmers are advised to remove the half cut stubbles of pigeon pea from their fields. This will avoid multiplication and spreading of Sterility Mosaic disease.
- The grains of the harvested crops should be properly dried by retaining moisture percentage of 11-12 % in cereals, 9% in pulses, 8% in oilseeds and 5-6% in vegetable seeds for long storage and also to minimize the store pest damage.

Tamil Nadu

Amount of rainfall received during the period of 01 to 21 March 2019 over Tamil Nadu is 3.1 mm (74 % deficit).

- Anticipated weather condition is favourable for Fruit rot / Die back diseases and fruit borer in chillies. To control, three sprayings with Wettable Sulphur or Copper Oxy Chloride 0.25% or Zineb 0.15% is advised.

- Prevailing weather condition is favorable for citrus canker disease incidence. To control, spray Copper Oxy Chloride 0.2% at fortnight intervals.
- Prevailing weather condition is congenial for sucking pests like thrips and aphids problem in chillies. To control, spray Imidacloprid 17.8% SL @ 3 ml/10 litres.

Maharashtra

No rainfall received during 01 to 21 March 2019 over different meteorological sub divisions of the state viz., Konkan, Madhya Maharashtra and Marathwada. Amount of rainfall received over Vidarbha is 1.0 mm (87% deficit).

Marathwada

- Harvesting and threshing of timely sown mature safflower crop should be done.
- During water stress condition in sugarcane crop, remove lower mature as well as dry leaves and use it for mulching.
- During summer season due to high temperature, the loss of water through evaporation and transpiration is more. Therefore, farmers are advised to irrigate the banana crop as per their requirement.
- Use drip irrigation system to irrigate the citrus orchard as well as apply the nutrients with the help of sprays i.e. water soluble nutrients.
- To control attack of sucking pest in tomato, chilli and brinjal, take a spray of Dimethoate 13 ml per 10 litre of water.

Konkan

- There is possibility for incidence of Leaf spot (Tikka) in groundnut, if incidence is noticed, take three spray of 1% Bordo mixture or 0.2% Mancozeb or 0.1% Carbendazim fungicide at an interval of 10 days.
- There is possibility of incidence of Powdery Mildew in mango, therefore it is advised to spray Hexaconazole 5% @ 5 ml or Wettable Sulphur 80% @ 20 gram per 10 litres of water.
- For increasing the production and quality mango fruits, spray 1 % Potassium Nitrate at pea stage, marble stage and arecanut size fruit stage.
- Due to variation in temperature, there is possibility of fruit drop of mango. Hence, provide irrigation for alphonso mango @ 150 to 200 litres of water at fortnight interval for 3 to 4 times to reduce fruit drop and increase the size of fruits.
- There is possibility of incidence of thrips on the nuts of cashewnut. If incidence is noticed spray Spinosad 45% SC @2.5 ml or Thiamethoxam 25% WG @ 2 gram per 10 litres of water.
- For control of incidence of thrips in summer okra, apply phorate 10G @ 10 kg ha⁻¹ by mixing into the soil around plant. Destroy all infected shoots and leaves. Install yellow sticky traps in to field.
- If the incidence of white flies, aphids, hoppers are noticed on tomato, brinjal, chilli and other vegetable crops, spray Malathion 20 ml or Dimethoate 15 ml per 10 litres of water at 10 to 15 days interval.
- Provide irrigation to fruit crop nursery, vegetable crops.
- Vaccination against Ranikhet disease in poultry birds under the supervision of veterinary officer is advocated.

Madhya Maharashtra

- In grapes, mango, pomegranate and sapota orchards mulching should be done with sugarcane trash and crop residues to avoid loss of water from evaporation.
- In summer groundnut and sunflower, spray Methyl Demeton 20 ml or Imidacloprid 4 ml in 10 litreS water to control sucking pests.
- In late sown wheat give irrigation at dough stage (80-85 DAS).
- Give protective irrigation in drumstick and use crop residue for mulching to conserve soil moisture.
- To control Powdery mildew and mango hoppers on bloomed mungo, spray Imidacloprid (17.8 SL) 3-4 ml + Sulphur 80 WP 25 gm per 10 litre water.

Chhattisgarh

Amount of rainfall received over Chhattisgarh during 01 to 21 March 2019 is 8.9 mm (24 % excess).

- To control borer insect in okra and brinjal, use pheromone traps @ 10Nos/acre and destroy the upper portion of affected plants.
- Farmers are advised to take care of their summer crops viz. paddy, groundnut, moong and vegetables from insects.
- Attack of stem borer may be seen in summer rice. Therefore, farmers are advised to use Pheromone traps @ 10 Nos per acre and collect and destroy the egg clusters.
- Farmers are advised for ploughing the field and keep the field ready for summer crops like sesamum, green gram, black gram and vegetables.

Bihar

Amount of rainfall received over Bihar during 01 to 21 March 2019 is 0.6 mm (89 % deficit).

- Sowing of green gram and black gram is advised. Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulphur/ha is advised during land preparation. Pusa Vishal, Samrat, SML-668, HUM-16 and Sona varieties for mung bean and Pant Urd-19 and Pant Urd-31, Ultra and Naveen varieties of urd are recommended for sowing in North Bihar.
- Complete the sowing of summer vegetables. Monitoring of red pumpkin beetle is advised in cucurbitaceous vegetables, which are in seedling stage. Dusting of Chlorpyrifos 2% dust @ 20 kg per hectare near root of the plant is advised for control of grubs infestation. In severe cases, spraying of Dichlorvos76EC@1 ml/litre of water is advised.
- Dry and hot weather is favourable for outbreak of onion thrips. Regular monitoring is advised for thrips infestation in onion. If the insect population is above ETL, spraying of Profenofos@1ml/litre or Imidacloprid @1ml/4 litre of water is advised. Add sticker@ 1ml/litre of water for better result.

Himachal Pradesh

Himachal Pradesh has received 47.9 mm of rainfall during 01 to 21 March 2019, which is 35% deficit.

- As soon as weather clears, intercultural operations of radish, carrot, turnip, spinach, carrot, broccoli and lettuce may be done.
- For monitoring of borer in vegetables like brinjal, cauliflower, cabbage and tomato, farmers are advised to use Pheromone traps.
- Farmers are advised to apply mulch and well rotten FYM on ginger, turmeric, colcasia and leafy vegetables.
- Farmers are advised for monitoring of mustard crop against attack of white rust.
- It is optimum time for nursery raising of tomato, brinjal, chillies, cole crops and capsicum crops in poly-houses. Weather is conducive for infection of Blight in potato and tomato. Constant monitoring is advised.

Jammu

Rainfall received during 01 to 21 March 2019 over Jammu is 69.5 mm, which is 31% deficit.

- To control Collar rot and Root rot in *rabi* pulses, rogue out the severely infected plants and drench affected areas with Thiram @ 0.2% or Carbendazim @ 0.1%.
- To control red pumpkin beetle in cucurbits especially cucumber and bottle gourd, incorporate 10 gram Phorate granules in the pits during transplanting.
- Harvest the mustard crop when pods turn yellow. The bundles of the harvested plants should be kept in stack with head upwards before threshing.
- Farmers are advised to regularly monitor wheat fields for Yellow rust and if noticed, apply Propiconazole (Tilt) @ 25ml in 25 litres of water.
- To control Loose smut in wheat, rogue out affected plants and destroy by burning.

***Disclaimer:** The predictability of weather depends on many factors which are dynamic in nature. The success of agromet advisories provided here depends on the accuracy of the forecasts. In no event will India Meteorological Department (IMD) and Indian Council of Agricultural Research (ICAR) be liable to the user or to any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit resulting from any use or misuse of the information on this bulletin. There is no sub divisional wise rainfall map received from IMD.*